Page 2 of 11

LISTING OF CLAIMS:

Please reconsider the claims as follows:

- 1 1. (previously presented) A method, comprising:
- 2 reducing the power level of an optical data signal propagating in an optical fiber
- 3 path in response to a loss of a counter-propagating supervisory signal in the optical fiber
- 4 path;
- 5 reducing counter-propagating optical power in response to a loss of the optical
- 6 data signal; and
- 7 responsive to the loss of the optical data signal, reducing counter-propagating
- 8 optical signal power output from at least one additional network element by a
- 9 predetermined amount.
 - 2, (canceled)
- 3. (previously presented) The method of claim 1, wherein the step of reducing the power
- 2 level of the optical data signal and the step of reducing counter-propagating optical power
- are performed substantially at the same time.
- 4. (previously presented) The method of claim 1, wherein the step of reducing the power
- 2 level of the optical data signal comprises at least one of:
- reducing pump power supplied by at least one pump source coupled to the optical
- 4 fiber path; and
- reducing gain supplied by at least one optical amplifier coupled to the optical fiber
- 6 path.
- 1 5. (previously presented) The method of claim 4, wherein the step of reducing the
- 2 counter-propagating optical power comprises reducing counter-propagating pump power
- 3 supplied by at least one pump source coupled to the optical fiber path.

1

Serial No. 10/092,746 Page 3 of 11

- 6. (previously presented) The method of claim 1, wherein the power level of the optical
- 2 data signal is reduced by a predetermined amount such that harm from an optical signal
- 3 emanating from a fault in the optical fiber path is substantially reduced.
- 1 7. (previously presented) The method of claim 1, wherein the counter-propagating optical
- 2 power is reduced by a predetermined amount such that harm from an optical signal
- 3 emanating from a fault in the optical fiber path is substantially reduced.
- 8. (previously presented) The method of claim 1, further comprising the step of restoring
- 2 the power level of the optical data signal in response to the presence of the counter-
- 3 propagating supervisory signal.
- 9. (previously presented) The method of claim 1, further comprising the step of restoring
- 2 the counter-propagating optical power in response to a notification of the presence of the
- 3 counter-propagating supervisory signal.
 - 10. (previously presented) A method, comprising:
- a) detecting loss of a supervisory signal counter-propagating in an optical fiber

 path at a first network element;
- b) responsive to the loss of the supervisory signal in the optical fiber path,
- 5 reducing the power level of an optical data signal output to the optical fiber path from the
- 6 first network element by a predetermined amount;
- c) detecting loss of the optical data signal propagating in the optical fiber path at a second network element;
- d) responsive to the loss of the optical data signal, reducing counter-propagating optical power output from the second network element by a predetermined amount; and
- 11 c) responsive to the loss of the optical data signal, reducing counter-propagating
 12 optical signal power output from a third network element by a predetermined amount.
 - 11. (canceled)

Serial No. 10/092,746 Page 4 of 11

- 1 12. (previously presented) The method of claim 10, wherein the steps b) and d) are
- 2 performed substantially at the same time.
- 1 13. (original) The method of claim 10, wherein step b) comprises at least one of:
- 2 reducing pump power supplied by at least one pump source coupled to the optical
- 3 fiber path in the first network element; and
- reducing gain of at least one optical amplifier coupled to the optical fiber path in
- 5 the first network element.
- 1 14. (previously presented) The method of claim 10, wherein step d) comprises reducing
- 2 counter-propagating pump power supplied by at least one pump source coupled to the
- 3 optical fiber path in the second network element.
- 1 15. (canceled)
- 1 16. (previously presented) A network element adapted for use in an optical transmission
- 2 system, comprising:
- a first gain element, for providing an upstream optical signal to an upstream
- 4 optical fiber path;
- a controller, for reducing the power level of the upstream optical signal generated
- by the first gain element to the upstream optical fiber path in response to the absence of a
- 7 counter-propagating supervisory signal in the upstream optical fiber path;
- a second gain element, for providing a counter-propagating downstream optical
- 9 signal to an downstream optical fiber path; and
- the controller, for reducing the power level of the counter-propagating
- downstream optical signal generated by the second gain element to the downstream
- 12 optical fiber path in response to the loss of an optical signal propagating in the
- downstream optical fiber path, wherein the controller, in response to the absence of the

Serial No. 10/092,746 Page 5 of 11

- 14 counter-propagating supervisory signal, provides an indication to a downstream network
- element that the supervisory signal is absent.
- 1 17. (canceled)
- 1 18. (original) The network element of claim 16, wherein the network element comprises
- 2 a repeater.
- 1 19. (original) The network element of claim 18, wherein the at least one gain element
- 2 comprises at least one of an optical amplifier and a pump source.
- 1 20. (previously presented) In a lightwave communication system having a plurality of
- 2 network elements for supplying an optical signal adapted for transmission in an optical
- 3 fiber path, an apparatus for controlling power of an optical signal propagating in the
- 4 optical fiber path comprising:
- means for detecting loss of a supervisory signal counter-propagating in the optical
- 6 fiber path;
- a first automatic power reduction circuit for reducing the power level of an optical
- 8 data signal output to the optical fiber path from a first network element by a
- 9 predetermined amount in response to the loss of the supervisory signal in the optical fiber
- 10 path;
- means for detecting loss of the optical data signal propagating in the optical fiber
- 12 path;
- a second automatic power reduction circuit for reducing counter-propagating
- 14 optical power output from a second network element by a predetermined amount in
- response to the loss of the optical data signal; and
- a controller, in response to the absence of the counter-propagating supervisory
- 17 signal, provides an indication to a third network element that the supervisory signal is
- 18 absent.

Serial No. 10/092,746 Page 6 of 11

21. (canceled)